Amendments to the Specification:

Please replace paragraph [0018] with the following amended paragraph:

[0018] Referring in detail to the drawings wherein similar parts of the invention are identified by like reference numerals, and, more specifically to FIGS. 1 and 2, a wind power energy converter for generating electricity 20 is illustrative of a vertical axis embodiment of the inventive wind turbine system. The energy converter installation 20 comprises, generally, a foundation or base 22 supporting a tower 24 which, in turn, supports the wind turbine 26. One or more electric power generators ~~20~~ 28 are located on the foundation 22 and driven by a flywheel 34. The generators ~~20~~ 28 are connected to the flywheel 34 by drive shafts 30 that are connected to a right-angle drive 32 that is rotatably connected to the flywheel. The right angle drive 32 may also include variable ratio gearing or other power transmission components, such as a hydrostatic pump and motor, to control the speed of rotation of the generator ~~20~~ 28 under variable wind conditions. A power transmission apparatus rotatably connects the flywheel 34 and the wind turbine 26 at the top of the tower 24. The exemplary power transmission apparatus, as illustrated in FIGS. 1 and 2, includes a clutch 33 to selectively connect the flywheel 34 to a main drive shaft 36 that is connected to and rotated by the wind turbine 26. However, other known power transmission apparatuses could be used to transfer power from the wind turbine 26 to the flywheel 34. For example, a hydraulic pump connected to be driven by the wind turbine 26 could supply pressurized fluid to drive a hydraulic motor connected to rotate the flywheel 34. While the illustrated energy converter installation 20 incorporates electrical generators, pumps or other energy conversion devices attached to the flywheel could be used to convert the rotational energy of the wind turbine to an elevated fluid or another form of energy. Likewise, the energy converter installation 20 includes a right angle drive 32, but the generator 28, other energy conversion devices, and power transmission devices could be mounted in-line with the main drive shaft 36.

Please replace paragraph [0022] with the following amended paragraph:

[0022] The vanes 80 of the wind turbine 26 comprise a surface 94 bounded by a leading edge 100, a trailing edge 102, a upper end 86, and a second end 88. A line connecting and approximately bisecting the upper end 86 and the lower end 88 defines a substantially longitudinal axis 90 of the vane 80. A line extending transverse to the longitudinal axis defines a substantially lateral, chord axis ~~92~~ 96 of the vane 80. Referring to FIG. 7, the shape of the surface 94 of the vane 90 substantially corresponds to a portion of the surface of a prolate spheroid 150 that would be overlaid if a planar blank 156 of the vane was aligned with its longitudinal axis 152 skewed relative to the polar axis 154 of the spheroid and then wrapped over the surface of the spheroid. Typically, the longitudinal axis 152 of the blank is skewed between 30° and 60° to the polar axis of the spheroid for the purpose of generating the surface but other lesser or greater angles of skew can be used. The leading 100 and trailing 102 edges of the vane 80 are elongated S-curves extending between the upper 86 and lower 88 ends of the vane. The elongated S-curves result from overlaying the blank 156 of the vane, having edges spatially corresponding to the leading 100 and trailing 102 edges of the vane and defined by sine waves having neutral axes substantially parallel to the longitudinal axis of the vane, on the surface of the spheroid 150.

Please replace paragraph [0023] with the following amended paragraph:

[0023] Referring to FIG. 8, when viewed in the direction of the longitudinal axis ~~94~~ 90, the surface 94 of the vane 80 has an elliptical profile. The shape of the ellipse is determined by the lengths of a minor axis 180 extending perpendicular to the surface 94 and a major axis 182 (indicated by a bracket) extending in the direction of the chord axis ~~92~~ 96 of the vane 80. The minor axis 180 varies in length from the upper end of the vane to the lower end of the vane so that the elliptical profile of the surface 94 takes the form of a truncated, conical ellipse. When viewed in the direction of the longitudinal axis ~~94~~ 90, the vane 80 is substantially planar at its upper end 86, as illustrated in FIG. 5, and substantially curved at its lower end 88, as illustrated in FIG. 6. Air flowing over the curved surface 94 of the vane 80 generates a lift force to rotate

the turbine and the cupped profile of the reverse surface 95 of the vane enhances turbine start-up by catching the wind.